

REMARKS

This is an Amendment and Reply to the Office Action dated January 24, 2005. Claims 12, 13, 15, and 17-23 are pending in this application. By this Amendment, claims 12, 13, 18, 19, 21 and 23 have been amended to clarify the Applicant's claimed invention. Accordingly, claims 12, 13, 15 and 17-23 remain at issue.

In the Office Action, the Examiner has set forth new grounds for rejection based on the same references cited in a previous rejection. Specifically, the Examiner has rejected claims 12, 13, 15 and 17-23 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,777,427 to Nichols in view of U.S. Patent No. 5,560,282 to Trenner et al. The Applicant respectfully traverses the Examiner's contention.

Once again relying upon Nichols and Trenner et al., the Examiner now contends that it would have been obvious at the time the invention was made to one having ordinary skill in the art to: (1) make the toothed portion of the piston and the piston itself in two pieces, as the Examiner contends is taught by Trenner et al.; (2) make the toothed portion of the shaft and the shaft itself as one piece, as the Examiner contends is taught by Nichols; (3) make the diameter of one bearing site slightly smaller than the other bearing site for the purpose of ease of assembly and to prevent damaging the toothed area, as the Examiner contends is also Taught by Trenner et al.; and (4) add a groove between each bearing site and the toothed area to the shaft in Nichols to accommodate the modifications made in this combination, i.e., to accommodate the reinforcing flanges 72 of the piston disclosed in Nichols.

The Applicant once again submits that the Examiner's contentions do not support a prima facie showing of obviousness because, among other things:

- the extensive modifications required by the Examiner are neither taught nor suggested by the cited art, and indeed actually support a finding of nonobviousness;
- the Examiner actually impermissibly relies on hindsight and utilizes the Applicant's claimed invention as a roadmap in an attempt to "piece together" elements of the Applicant's claimed invention, as evidenced by the extensive modifications required to arrive at the Applicant's claimed invention; and
- the modifications required by the Examiner would actually destroy the functionality of the motor of Nichols.

Accordingly, the Examiner's obviousness rejection is improper and should be withdrawn.

Nonetheless, to facilitate advancement of claims directed to a more particular embodiment—and without concession that any prima facie case of obviousness has been established by the Examiner based on the cited references—the Applicant has amended the claims to be directed to an actuator wherein the piston and the shaft are of a one-piece configuration. This is distinct from Nichols and Trenner et al. Furthermore, neither of these references teaches, suggests, or otherwise provides motivation for such an arrangement. The Applicant submits that this distinction, in combination with the aforementioned arguments against obviousness, places all of the pending claims in condition for allowance.

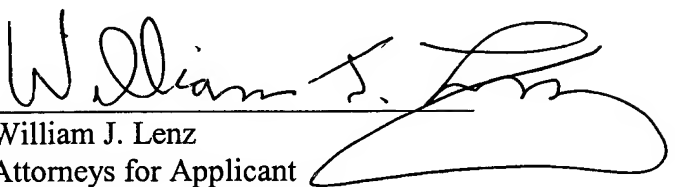
Based at least on the foregoing, the Applicant respectfully submits that claims 12, 13, 15, and 17-23 are allowable over the cited art and therefore requests that these claims be allowed. If the Examiner believes that an interview would help advance the prosecution of the pending claims, the undersigned welcomes such an opportunity.

Should anything further be required, a telephone call to the undersigned at (312) 226-1818 is respectfully requested. Additionally, if any charges or fees must be paid in connection with this amendment and reply, they may be paid out of our Deposit Account No. 50-0545.

Respectfully submitted,

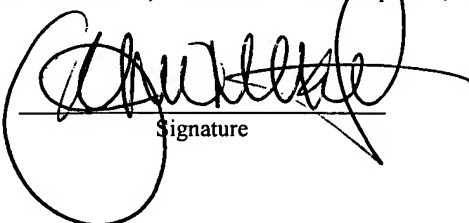
FACTOR & LAKE, LTD.

Dated: April 25, 2005


William J. Lenz
Attorneys for Applicant

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Patent Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 25, 2005.


Signature